

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,656	(	02/05/2001	David L. Johnson	AT/K-22162/P1/CGC 2054	2528
324	7590	02/21/2002			
		CHEMICALS CO	EXAMINER		
PATENT DEPARTMENT 540 WHITE PLAINS RD			HAMILTON, CYNTHIA		
	P O BOX 2005 TARRYTOWN, NY 10591-9005			ART UNIT	PAPER NUMBER
	ŕ			1752	5
				DATE MAILED: 02/21/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

		MF
• • • • • • • • • • • • • • • • • • • •	Application No.	pplicant(s)
	09/776,656	JOHNSON ET AL.
Office Action Summary	Examiner	Art Unit
	Cynthia Hamilton	1752
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet	with th correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replection of the period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute. Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, however, may ly within the statutory minimum of t will apply and will expire SIX (6) Mine, cause the application to become	a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on <u>05</u>	February 2001 .	
2a) This action is FINAL. 2b) The	his action is non-final.	
3) Since this application is in condition for allow closed in accordance with the practice under		
Disposition of Claims		
4) Claim(s) 18 is/are pending in the application.		
4a) Of the above claim(s) is/are withdra	wn from consideration.	
5) Claim(s) is/are allowed.		
6) Claim(s) is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) 1-18 are subject to restriction and/or	election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examine	er.	
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by	y the Examiner.
Applicant may not request that any objection to the	ne drawing(s) be held in abo	eyance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed on	_ is: a)∏ approved b)⊡	disapproved by the Examiner.
If approved, corrected drawings are required in re	eply to this Office action.	
12) The oath or declaration is objected to by the E	xaminer.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C	C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:		·
1. Certified copies of the priority document	ts have been received.	
2. Certified copies of the priority document	ts have been received in	Application No
3. Copies of the certified copies of the price application from the International But 100 cm.	ureau (PCT Rule 17.2(a))	).
* See the attached detailed Office action for a list	·	
14) Acknowledgment-is-made-of-a-claim-for-domest		
a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domes	• •	
Attachment(s)	🗖	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ol>	5) Notice	ew Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)

Art Unit: 1752

## **DETAILED ACTION**

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-16, drawn to a liquid, radiation-curable composition, classified in class
     430, subclass 280.1.
  - II. Claim17, drawn to a method of curing by treatment with actinic radiation, classified in class 522, subclass 182.
  - III. Claim 18, drawn to a method for producing a three-dimensional shaped article, classified in class 430, subclass 269.

The inventions are distinct, each from the other because of the following reasons:

a. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the composition of group I can be used to encapsulate electronics then cured by heat overall or can be used to form three dimensional objects wherein heat cure and irradiation are needed to form a three dimensional object or be used as an intermediate to forming an free radical curing compositions wherein the material is layered next to a layer of free radical curing agent activated by irradiation to form a solder mask or is used as an intermediate to which a free-radical-initiator-will-be-added at time-of-use.

Art Unit: 1752

b. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the composition of group I can be used to encapsulate electronics then cured by heat overall or can be used to form molded objects wherein no layering occurs or be used as an intermediate to forming an free radical curing compositions wherein the material is layered next to a layer of free radical curing agent activated by irradiation to form a solder mask or is used as an intermediate to which a free radical initiator will be added at time of use.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

- 2. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 4. If Group I is elected, the following election of species must also be made.
- 5.——Claim-1-is-generic-to-a-plurality-of-disclosed-patentably-distinct-species\_comprising\_
  Species A compositions wherein epoxide rings are present as in claim 9, Species B -

Art Unit: 1752

compositions without epoxies but instead ring opening compounds like those disclosed in the paragraph crossing pages 4 and 5 such as oxetane, tetrahydropyran, or lactone ring compounds wherein species B1 is like that wherein a poly(meth)acrylate whether Component (c) on page 12 or optional (e) is present and classifiable in class 430 subclass 285.1, or species B2 wherein no poly(meth)acrylates are present but instead vinyl ethers are used. Applicant is required under 35 U.S.C. 121 to elect a single ultimate disclosed species without variables making clear what components of the genus are present or are not present and what claims read on the composition, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- If Group II is elected, the following election of species must also be made. 6.
- Claim 17 is generic to a plurality of disclosed patentably distinct species comprising 7. Species A - as evidenced by page 12 of the specification a process of curing using an ethylenically unsaturated compound obtained from an epoxy compound as found in class 522, subclass 100, Species B - a composition with specified cationic photo initiators; and Species C a composition without A or B wherein epoxy compounds are polymerized as found in class 522, subclass 170. Applicant is required under 35 U.S.C. 121 to elect a single disclosed ultimate species-without-variable-identifying-each-component as set forth in instant claim 1 and if it is present or not, even though this requirement is traversed.



Art Unit: 1752

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

8. Due to the complexity of this election/ restriction requirement, no attempt was made to obtain a telephonic election.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-93-10 for regular communications and (703) 872-9311 for After Final communications.

Art Unit: 1752

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 0661.

C. Hamilton February 17, 2002

CYNTHIA HAMILTON PRIMARY EXAMINER